IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

BECTON, DICKINSON AND COMPANY	ľ
and CELLULAR RESEARCH, INC.	

Plaintiffs,

C.A. No. 18-1800-RGA

v.

10X GENOMICS, INC.

Defendant.

DEFENDANT 10X GENOMICS, INC.'S ANSWER AND COUNTERCLAIMS TO PLAINTIFF BECTON, DICKINSON AND COMPANY AND CELLULAR RESEARCH, INC.'S COMPLAINT

Defendant and Counterclaim-Plaintiff 10X Genomics, Inc. ("10X") hereby answers the First Amended Complaint of Plaintiffs and Counterclaim-Defendants Becton Dickinson and Company and Cellular Research, Inc. (collectively, "BD") (D.I. 15) as follows:

NATURE OF THE ACTION

- 1. 10X admits that the First Amended Complaint purports to be an action for patent infringement arising under the Patent Laws of the United States of America, Title 35, United States Code. 10X expressly denies any and all remaining allegations and/or legal conclusions asserted in the First Amended Complaint and denies that BD is entitled to any relief whatsoever.
- 2. 10X admits that the First Amended Complaint purports to be an action for patent infringement arising under the Patent Laws of the United States of America, Title 35, United States Code. 10X expressly denies any and all remaining allegations and/or legal conclusions asserted in the First Amended Complaint and denies that BD is entitled to any relief whatsoever.

THE PARTIES

- 3. 10X admits that BD alleges that Becton, Dickinson and Company is a corporation organized and existing under the laws of New Jersey, with its principal place of business in Franklin Lakes, NY. 10X is otherwise without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 3 of the First Amended Complaint and, therefore, denies those allegations.
- 4. 10X admits that BD alleges that Cellular Research, Inc. is a corporation organized and existing under the laws of Delaware, with its principal place of business in Menlo Park, California. 10X is otherwise without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 4 of the First Amended Complaint and, therefore, denies those allegations.
- 5. 10X admits that it is a Delaware corporation with its principal place of business in Pleasanton, California. 10X denies the remaining allegations in Paragraph 5 of the First Amended Complaint.

JURISDICTION AND VENUE

- 6. 10X admits that the First Amended Complaint purports to be an action for patent infringement arising under the Patent Laws of the United States of America, Title 35, United States Code. 10X expressly denies any and all remaining allegations and/or legal conclusions asserted in the First Amended Complaint and denies that BD is entitled to any relief whatsoever.
- 7. Paragraph 7 of the First Amended Complaint states a legal conclusion to which no response is required. To the extent a response is required, 10X admits this Court has subject matter jurisdiction over this action under Title 28 U.S.C. §§ 1331 and 1138(a).
- 8. Paragraph 8 of the First Amended Complaint states a legal conclusion to which no response is required. To the extent a response is required, 10X admits this Court has personal

jurisdiction over 10X for the purpose of this action. 10X admits that it is incorporated under the laws of Delaware. 10X denies the remaining allegations in Paragraph 8.

9. Paragraph 9 of the First Amended Complaint states a legal conclusion to which no response is required. To the extent a response is required, 10X admits that it is incorporated under the laws of Delaware. 10X denies the remaining allegations in Paragraph 9.

BACKGROUND

- 10. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 10 of the First Amended Complaint and, therefore, denies those allegations.
- 11. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 11 of the First Amended Complaint and, therefore, denies those allegations.
- 12. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 12 of the First Amended Complaint and, therefore, denies those allegations.
- 13. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 13 of the First Amended Complaint and, therefore, denies those allegations.
- 14. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 14 of the First Amended Complaint and, therefore, denies those allegations.
- 15. 10X denies that "The [BD] Asserted Patents relate to fundamental technologies for single molecule digital counting (Fodor patents) and single-cell multiplex analysis (Fan patents) platforms." 10X is without information or knowledge sufficient to form a belief as to the truth of

the remaining allegations in Paragraph 15 of the First Amended Complaint and, therefore, denies those allegations.

- 16. 10X denies the allegations and/or legal conclusions set forth in Paragraph 16 and denies that BD is entitled to any relief whatsoever.
- 17. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegation in Paragraph 17 of the First Amended Complaint that "10X has not obtained such a license" and, therefore, denies that allegations. 10X denies any and all remaining allegations and/or legal conclusions set forth in Paragraph 17 and denies that BD is entitled to any relief whatsoever.

BD'S PURPORTED OVERVIEW OF ACCUSED 10X PRODUCTS

- 18. 10X denies the allegations and/or legal conclusions set forth in Paragraph 18 and denies that BD is entitled to any relief whatsoever.
- 19. 10X admits that it makes, uses, sells, offers to sell, or imports certain solutions, including ChromiumTM Single Cell Gene Expression, ChromiumTM Single Cell Immune Profiling, and Spatial Gene Expression. 10X admits that it acquired Spatial Transcriptomics Holdings AB in November 2018 and is integrating the Spatial Transcriptomics technologies into its business. 10X denies the remaining allegations in Paragraph 19.
- 20. 10X admits that 10X's Single Cell Gene Expression solution provides the ability to measure the transcriptome of single cells. 10X admits that 10X's Single Cell Immune Profiling solution provides the ability to study immune cells at the single cell level. 10X admits that 10X's Spatial Gene Expression solution provides the ability to perform spatial analysis. 10X otherwise denies the remaining allegations in Paragraph 20, expressly denies any and all the allegations and/or legal conclusions set forth in paragraph 20 and denies that BD is entitled to any relief whatsoever.

BD'S DESCRIPTION OF PURPORTED SINGLE CELL 3' WORKFLOW ACCUSED PRODUCTS

- 21. 10X admits that the website 10xgenomics.com/solutions/single-cell/ states that 10X's Single Cell Gene Expression solution "provides a comprehensive, scalable solution for cell characterization and gene expression profiling of hundreds to tens of thousands of cells." 10X further admits that the website 10xgenomics.com/solutions/single-cell/ states "See how the 10x technology suite performs millions of parallel reactions to enable gene expression profiling at scale with single cell resolution." 10X otherwise denies the remaining allegations in Paragraph 21.
- 22. 10X admits that 10X's Single Cell Gene Expression solution is sometimes referred to as 10X's Chromium Single Cell 3' solution. 10X further admits that it is selling Gene Expression v3.1 and Gene Expression v3. 10X otherwise denies the remaining allegations in Paragraph 22.
 - 23. 10X denies the allegations of Paragraph 23.
- 24. 10X admits that it has sold products including the Chromium Single Cell 3' Library & Gel Bead Kit v2, 16 rxns (Product ID 120237), the Chromium Single Cell 3' Library & Gel Bead Kit v2, 4 rxns (Product ID 120267), Chromium Single Cell 3' Library Kit (Product ID 120230), and the Chromium Single Cell 3' Gel Bead Kit (Product ID 120231). 10X otherwise denies the remaining allegations in this Paragraph.
- 25. 10X admits that the "Chromium Single Cell 3' Library & Gel Bead Kit v2, 16 rxns" (Product ID 120237) included the "Chromium Single Cell 3' Library Kit v2, 16 rxns" (Product ID 120234) and the "Chromium Single Cell 3' Gel Bead Kit v2, 16 rxns" (Product ID 120235). 10X otherwise denies the remaining allegations in this Paragraph.
- 26. 10X admits that the "Chromium Single Cell 3' Library Kit v2, 16 rxns" (Product ID 120234) included RT Reagent Mix (Product ID 220089), RT Enzyme Mix (Product ID 220079), Additive A (Product ID 220074), RT Primer (Product ID 310354), Buffer Sample Clean Up 1

(Product ID 220020), Amplification Master Mix (Product ID 220125), cDNA Primer Mix 1 (Product ID 220106), cDNA Additive 1 (Product ID 220067), Fragmentation Enzyme Blend (Product ID 220107), Fragmentation Buffer (Product ID 220108), Ligation Buffer (Product ID 220109), DNA Ligase (Product ID 220110), Adaptor Mix (Product ID 220026), and SI-PCR Primer (Product ID 220111). 10X otherwise denies the remaining allegations in this Paragraph.

- 27. 10X admits that the "Chromium Single Cell 3' Gel Bead Kit v2, 16 rxns" (Product ID 120235) included Single Cell 3' Gel Beads (Product ID 220104). 10X otherwise denies the remaining allegations in this Paragraph.
- 28. 10X admits that the "Chromium Single Cell 3' Library Kit" (Product ID 120230) included RT Reagent Mix (Product ID 220071), RT Enzyme Mix (Product ID 220070), RNase Inhibitor (Product ID 220065), Additive A (Product ID 220074), RT Primer (Product ID 310354), Buffer for Sample Clean Up (Product ID 220020), cDNA Primer Mix 1 (Product ID 220066), cDNA Additive 1 (Product ID 220067), Amplification Master Mix (Product ID 220073), End Repair and A-tailing Buffer (Product ID 220046), End Repair and A-tailing Enzyme (Product ID 220047), Ligation Buffer (Product ID 220048), DNA Ligase (Product ID 220049), R1 Adaptor Mix (Product ID 220064), and SI-PCR Primer (Product ID 220068), and Surrogate Fluid (Product ID 220021). 10X otherwise denies the remaining allegations in this Paragraph.
- 29. 10X admits that the "Chromium Single Cell 3' Gel Bead Kit" (Product ID 120231) included Single Cell 3' Gel Bead Strip (Product ID 220063). 10X otherwise denies the remaining allegations in this Paragraph.
- 30. 10X admits that the "Chromium Single Cell 3' Library & Gel Bead Kit v2, 4 rxns" (Product ID 120267) included the "ChromiumTM Single Cell 3' Library Kit v2, 4 rxns" (Product

ID 120264) and the "Chromium Single Cell 3' Gel Bead Kit v2, 4 rxns" (Product ID 120265). 10X otherwise denies the remaining allegations in this Paragraph.

- 31. 10X admits that the "Chromium™ Single Cell 3' Library Kit v2, 4 rxns" (Product ID 120264) included RT Reagent Mix (Product ID 220089), RT Enzyme Mix (Product ID 220127), Additive A (Product ID 220074), RT Primer (Product ID 310354), Buffer Sample Clean Up 1 (Product ID 220020), Amplification Master Mix 1 (Product ID 220129), cDNA Primer Mix 1 (Product ID 220106), cDNA Additive 1 (Product ID 220067), Fragmentation Enzyme Blend (Product ID 220130), Fragmentation Buffer (Product ID 220108), Ligation Buffer (Product ID 220109), DNA Ligase (Product ID 220131), Adaptor Mix (Product ID 220026), and SI-PCR Primer (Product ID 220111). 10X otherwise denies the remaining allegations in this Paragraph.
- 32. 10X admits that the "Chromium Single Cell 3' Gel Bead Kit v2, 4 rxns" (Product ID 120265) included Single Cell 3' Gel Beads (Product ID 220104). 10X otherwise denies the remaining allegations in this Paragraph.
- 33. 10X admits that it sold additional products that could be used with version 2 of 10X's Single Cell Gene Expression solution, including: the "Chromium Single Cell A Chip Kit, 48 rxns" (Product ID 120236), the "Chromium Single Cell A Chip Kit, 16 rxns" (Product ID 1000009), the "Chromium Multiplex Kit, 96 rxns" (Product ID 120262), and the "Chromium Single Cell 3' Chip Kit" (Product ID 120232). 10X otherwise denies the remaining allegations in this Paragraph.
- 34. 10X admits that the "Chromium Single Cell A Chip Kit, 48 rxns" (Product ID 120236) included Single Cell A Chip (Product ID 230027), Gaskets (Product ID 370017), Partitioning Oil (Product ID 220088), and Recovery Agent (Product ID 220016). 10X otherwise denies the remaining allegations in this Paragraph.

- 35. 10X admits that the "Chromium Single Cell A Chip Kit, 16 rxns" (Product ID 1000009) included Single Cell A Chip (Product ID 2000019), Gaskets (Product ID 3000072), Partitioning Oil (Product ID 220088), and Recovery Agent (Product ID 220016). 10X otherwise denies the remaining allegations in this Paragraph.
- 36. 10X admits that the "Chromium Multiplex Kit, 96 rxns" (Product ID 120262) includes the ChromiumTM i7 Sample Index Plate (Product ID220103). 10X otherwise denies the remaining allegations in this Paragraph.
- 37. 10X admits that the "Chromium Single Cell 3' Chip Kit" (Product ID 120232) included Single Cell 3' Chips (Product ID 230008), Gaskets (Product ID 370017), Partitioning Oil (Product ID 220017), and Recovery Agent (Product ID 220016). 10X otherwise denies the remaining allegations in this Paragraph.
- 38. 10X admits that it sold the "Chromium Training Chip Kit" (Product ID 120244), and the "Chromium Training Reagents and Gel Bead Kit" (Product ID 120238). 10X otherwise denies the remaining allegations in this Paragraph.
- 39. 10X admits that it sold the "Chromium Controller & Accessory Kit" with 12- or 24-month warranty (Product ID 120223 or 120246) and the "Chromium Single Cell Controller & Accessory Kit" with 12 or 24 month warranty (Product ID 120263 or 120212). 10X otherwise denies the remaining allegations in this Paragraph.
- 40. 10X admits that the "Chromium Controller Accessory Kit" (Product ID 110204) included Power Cord (Product ID 34000X), $10x^{TM}$ Vortex Adapter (Product ID 330002), $10x^{TM}$ Chip Holder (Product ID 330019), $10x^{TM}$ Vortex Clip (Product ID 230002), $10x^{TM}$ Magnetic Separator (Product ID 230003), and Chromium Test Chip V1 (Product ID 230024). 10X otherwise denies the remaining allegations in this Paragraph.

- 41. 10X admits that it markets and/or sells instruments, reagents, software, parts and kits that can be used with its Single Cell Gene Expression solution. 10X further admits that its website describes its Single Cell Gene Expression solution. 10X further admits that 10X sells a Feature Barcode Library Kit and that v3 of 10X's Single Cell Gene Expression solution can be used with Feature Barcode Selection technology to measure multiple analytes. 10X otherwise denies the remaining allegations in this Paragraph.
- 42. 10X admits that it sells products that can be used with 10X's Single Cell Gene Expression solution, including: "Chromium Single Cell 3' Feature Barcode Library Kit 16 rxns" (Product ID 1000079), the "Chromium Single Cell 3' Library & Gel Bead Kit v3, 4 rxns" (Product ID 1000092), and the "Chromium Single Cell 3' Library & Gel Bead Kit v3, 16 rxns" (Product ID 1000075). 10X otherwise denies the remaining allegations in this Paragraph.
- 43. 10X admits that the "Chromium Single Cell 3' Feature Barcode Library Kit 16 rxns" (Product ID 1000079) included Feature cDNA Primers 1 (Product ID 2000096), Feature cDNA Primers 2 (Product ID 2000097), Feature SI Primers 1 (Product ID 2000098), Feature SI Primers 2 (Product ID 2000099), and Amp Mix 1 (Product ID 2000047). 10X otherwise denies the remaining allegations in this Paragraph.
- 44. 10X admits that the "Chromium Single Cell 3' Library & Gel Bead Kit v3, 4 rxns" (Product ID 1000092) included the "Chromium Single Cell 3' GEM Kit v3, 4 rxns" (Product ID 100094), the "Chromium Single Cell 3' Library Kit v3, 4 rxns" (Product ID 1000095), the "Chromium Single Cell 3' Gel Bead Kit v3, 4 rxns" (Product ID 1000093), and "Dynabeads MyOne SILANE" (Product ID 2000048). 10X otherwise denies the remaining allegations in this Paragraph.

- 45. 10X admits that the "Chromium Single Cell 3' GEM Kit v3, 4 rxns" (Product ID 100094) included RT Reagent (Product ID 2000086), RT Enzyme C (Product ID 2000102), Template Switch Oligo (Product ID 3000228), Reducing Agent B (2000087), Cleanup Buffer (Product ID 2000088), cDNA Primers (Product ID 2000089), and Amp Mix (Product ID 2000103). 10X otherwise denies the remaining allegations in this Paragraph.
- 46. 10X admits that the "Chromium Single Cell 3' Library Kit v3,4 rxns" (Product ID 1000095) included Fragmentation Enzyme (Product ID 2000104), Fragmentation Buffer (Product ID 2000091), Ligation Buffer (Product ID 2000092), DNA Ligase (Product ID 220131), Adaptor Oligos (Product ID 2000094), and SI Primer (Product ID 2000095). 10X otherwise denies the remaining allegations in this Paragraph.
- 47. 10X admits that the "Chromium Single Cell 3' Gel Bead Kit v3, 4 rxns" (Product ID 1000093) included Single Cell 3' v3 Gel Beads (Product ID 2000059). 10X otherwise denies the remaining allegations in this Paragraph.
- 48. 10X admits that the "Chromium Single Cell 3' Library & Gel Bead Kit v3, 16 rxns" (Product ID 1000075) included the "Chromium Single Cell 3' GEM Kit v3, 16 rxns" (Product ID 100077), the "Chromium Single Cell 3' Library Kit v3, 16 rxns" (Product ID 1000078), the "Chromium Single Cell 3' Gel Bead Kit v3, 16 rxns" (Product ID 1000076), and "Dynabeads MyOne SILANE" (Product ID 2000048). 10X otherwise denies the remaining allegations in this Paragraph.
- 49. 10X admits that the "Chromium Single Cell 3' GEM Kit v3, 16 rxns" (Product ID 100077) included RT Reagent (Product ID 2000086), RT Enzyme C (Product ID 2000085), Template Switch Oligo (Product ID 3000228), Reducing Agent B (2000087), Cleanup Buffer

(Product ID 2000088), cDNA Primers (Product ID 2000089), and Amp Mix (Product ID 2000047). 10X otherwise denies the remaining allegations in this Paragraph.

- 50. 10X admits that the "Chromium Single Cell 3' Library Kit v3, 16 rxns" (Product ID 1000078) included Fragmentation Enzyme (Product ID 2000090), Fragmentation Buffer (Product ID 2000091), Ligation Buffer (Product ID 2000092), DNA Ligase (Product ID 220110), Adaptor Oligos (Product ID 2000094), SI Primer (Product ID 2000095), and Amp Mix (Product ID 2000047). 10X otherwise denies the remaining allegations in this Paragraph.
- 51. 10X admits that the "Chromium Single Cell 3' Gel Bead Kit v3, 16 rxns" (Product ID 1000076) included Single Cell 3' v3 Gel Beads (Product ID 2000059). 10X otherwise denies the remaining allegations in this Paragraph.
- 52. 10X admits that it sold products that could be used with 10X's Single Cell Gene Expression solution, including: the "Chromium Chip B Single Cell Kit 48 rxns" (Product ID 1000073), the "Chromium Chip B Single Cell Kit 16 rxns" (Product ID 1000074), and the "Chromium i7 Multiplex Kit 96 rxns" (Product ID 120262). 10X otherwise denies the remaining allegations in this Paragraph.
- 53. 10X admits that the "Chromium Chip B Single Cell Kit 48 rxns" (Product ID 1000073) included Chromium Partitioning Oil (Product ID 220088), Chromium Recovery Agent (Product ID 220016), Chip B Single Cell (Product ID 2000060), and Gasket 6 pack (Product ID 370017). 10X otherwise denies the remaining allegations in this Paragraph.
- 54. 10X admits that the "Chromium Chip B Single Cell Kit 16 rxns" (Product ID 1000074) included Chromium Partitioning Oil (Product ID 220088), Chromium Recovery Agent (Product ID 220016), Chip B Single Cell (Product ID 2000060), and Gasket 2 pack (Product ID 370072). 10X otherwise denies the remaining allegations in this Paragraph.

- 55. 10X admits that the "Chromium Multiplex Kit, 96 rxns" (Product ID 120262) included the Chromium™ i7 Sample Index Plate (Product ID220103). 10X otherwise denies the remaining allegations in this Paragraph. 10X otherwise denies the remaining allegations in this Paragraph.
- 56. 10X admits that it sold products, including: the "Chromium Training Chip Kit" (Product ID 120244), and the "Chromium Training Reagents and Gel Bead Kit" (Product ID 120238). 10X otherwise denies the remaining allegations in this Paragraph.
- 57. 10X admits that it sold products that can be used with 10X's Single Cell Gene Expression solution, including: "Chromium Controller & Accessory Kit" with 12- or 24-month warranty (Product ID 120223 or 120246) and the "Chromium Single Cell Controller & Accessory Kit" with 12 or 24 month warranty (Product ID 120263 or 120212). 10X otherwise denies the remaining allegations in this Paragraph.
- 58. 10X admits that the "Chromium Controller Accessory Kit" (Product ID 110204) included Power Cord (Product ID 34000X), $10x^{TM}$ Vortex Adapter (Product ID 330002), $10x^{TM}$ Chip Holder (Product ID 330019), $10x^{TM}$ Vortex Clip (Product ID230002), $10x^{TM}$ Magnetic Separator (Product ID 230003), and Chromium Test Chip V1 (Product ID 230024). 10X otherwise denies the remaining allegations in this Paragraph.
- 59. Paragraph 59 does not appear to plead any factual assertions. For that reason, 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 59 of the First Amended Complaint and, therefore, denies those allegations. 10X further denies that any 10X product infringes any claim of U.S. Patent Nos. 8,835,358, 9,845,502, 9,315,857, 9,816,137, 9,708,659, 9,290,808, 9,290,809, 9,567,645, 9,567,646, 9,598,736, or

9,637,799 (collectively, the "BD Patents-in-Suit") and denies that BD is entitled to any relief whatsoever.

BD'S DESCRIPTION OF PURPORTED SINGLE CELL 5' WORKFLOW ACCUSED PRODUCTS

- 60. 10X admits that the website https://www.10xgenomics.com/solutions/vdj/ states that 10X's Single Cell Immune Profiling solution "is a comprehensive approach to simultaneously examine the cellular context of the adaptive immune response and immune repertoires of hundreds to tens of thousands of T and B cells in human or mouse on a cell-by-cell basis." 10X further admits that the website https://www.10xgenomics.com/solutions/vdj/ states that 10X's Single Cell Immune Profiling solution can be used to "identify cell type-specific immune repertoires on a cell-by-cell basis." 10X otherwise denies the remaining allegations in Paragraph 60.
- 61. 10X admits that 10X's Single Cell Immune Profiling solution is sometimes referred to as Chromium Single Cell V(D)J. 10X otherwise denies the remaining allegations in Paragraph 61.
- 62. 10X admits that it markets and/or sells instruments, reagents, software, parts, and kits for use with 10X's Single Cell Immune Profiling solution. 10X otherwise denies the remaining allegations in Paragraph 62.
- 63. 10X admits that it sells 10X's Chromium Single Cell Immune Profiling Solution.

 10X further admits that 10X's Chromium Single Cell Immune Profiling Solution may be used with or without Gene Expression and may be used with or without Feature Barcode Selection (including Feature Barcode Selection for use in analyzing cell surface proteins, antigen specificity, or other analytes). 10X further admits that 10X's Chromium Single Cell Immune Profiling Solution may be used to analyze human or mouse cells. 10X otherwise denies the remaining allegations in this Paragraph.

- 64. 10X admits that it has sold products that can be used with 10X's Single Cell Immune Profiling solution, including: the Chromium Single Cell 3' Library & Gel Bead Kit v2, 16 rxns (Product ID 120237), the Chromium Single Cell 3' Library & Gel Bead Kit v2, 4 rxns (Product ID 120267), Chromium Single Cell 3' Library Kit (Product ID 120230), and the Chromium Single Cell 3' Gel Bead Kit (Product ID 120231). 10X otherwise denies the remaining allegations in this Paragraph.
- 65. 10X admits that the "Chromium Single Cell 5' Library & Gel Bead Kit, 16 rxns" (Product ID 1000006) included the "ChromiumTM Single Cell 5' Library Kit, 16 rxns" (Product ID 1000002), the "ChromiumTM Single Cell 5' Gel Bead Kit, 16 rxns" (Product ID 1000003), and Dynabeads MyOne SILANE (Product ID 2000048). 10X otherwise denies the remaining allegations in this Paragraph.
- 66. 10X admits that the "Chromium™ Single Cell 5' Library Kit, 16 rxns" (Product ID 1000002) included RT Reagent Mix 1 (Product ID 220089), RT Enzyme Mix B (Product ID 2000010), Additive A (Product ID 220074), Poly-dT RT Primer (Product ID 2000007), Buffer Sample Clean Up 1 (Product ID 220020), Amplification Master Mix (Product ID 220125), cDNA Primer Mix (Product ID 220106), cDNA Additive (Product ID 220067), Fragmentation Enzyme Blend (Product ID 220107), Fragmentation Buffer (Product ID 220108), Ligation Buffer (Product ID 220109), DNA Ligase (Product ID 220110), Adaptor Mix (Product ID 220026), and SI-PCR Primer (Product ID 220111). 10X otherwise denies the remaining allegations in this Paragraph.
- 67. 10X admits that the "Chromium™ Single Cell 5' Gel Bead Kit, 16 rxns" (Product ID 1000003) included Single Cell 5' Gel Beads (Product ID 220112). 10X otherwise denies the remaining allegations in this Paragraph.

- 68. 10X admits that the "Chromium Single Cell 5' Library & Gel Bead Kit, 4 rxns" (Product ID 1000014) included the Chromium[™] Single Cell 5' Library Kit, 4 rxns (Product ID 1000011), the Chromium[™] Single Cell 5' Gel Bead Kit, 4 rxns (Product ID 1000010), and Dynabeads MyOne SILANE (Product ID 2000048). 10X otherwise denies the remaining allegations in this Paragraph.
- 69. 10X admits that the "Chromium™ Single Cell 5' Library Kit, 4 rxns" (Product ID 1000011) included RT Reagent Mix 1 (Product ID 220089), RT Enzyme Mix B (Product ID 2000021), Additive A (Product ID 220074), Poly-dT RT Primer (Product ID 2000007), Buffer Sample Clean Up 1 (Product ID 220020), Amplification Master Mix (Product ID 220125), cDNA Primer Mix (Product ID 220106), cDNA Additive (Product ID 220067), Fragmentation Enzyme Blend (Product ID 220130), Fragmentation Buffer (Product ID 220108), Ligation Buffer (Product ID 220109), DNA Ligase (Product ID 220131), Adaptor Mix (Product ID 220026), and SI-PCR Primer (Product ID 220111). 10X otherwise denies the remaining allegations in this Paragraph.
- 70. 10X admits that the "Chromium™ Single Cell 5' Gel Bead Kit, 4 rxns" (Product ID 1000010) included Single Cell 5' Gel Beads (Product ID 220112). 10X otherwise denies the remaining allegations in this Paragraph.
- 71. 10X admits that it has sold products that can be used with 10X's Single Cell Immune Profiling solution, including: the "Chromium Single Cell 3'/5' Library Construction Kit, 16 rxns" (Product ID 1000020), the "Chromium Single Cell V(D)J Enrichment Kit, Human T Cell, 96 rxns" (Product ID 1000005), the "Chromium Single Cell V(D)J Enrichment Kit, Human B Cell, 96 rxns" (Product ID 1000016), the "Chromium Single Cell A Chip Kit, 48 rxns" (Product ID 120236), the "Chromium Single Cell A Chip Kit, 16 rxns" (Product ID 1000009), the "Chromium Multiplex Kit, 96 rxns" (Product ID 120262), the "Chromium i7 Multiplex Kit N, Set A, 96 rxns"

(Product ID 1000084), the "Chromium Single Cell V(D)J Enrichment Kit, Mouse B Cell, 96 rxns" (Product ID 1000072), the "Chromium Single Cell V(D)J Enrichment Kit, Mouse T Cell, 96 rxns" (Product ID 1000071), and the "Chromium Single Cell 5' Feature Barcode Library Kit, 16 rxns" (Product ID 1000080). 10X otherwise denies the remaining allegations in this Paragraph.

- 72. 10X admits that the "Chromium Single Cell 3'/5' Library Construction Kit, 16 rxns" (Product ID 1000020) included "cDNA Additive" (Product ID 220067), Fragmentation Enzyme Blend (Product ID 220107), "Fragmentation Buffer (Product ID 220108), Ligation Buffer (Product ID 220109), DNA Ligase (Product ID 220110), Amplification Master Mix (Product ID 220125), Adapter Mix (Product ID 220026), and SI-PCR Primer (Product ID 220111). 10X otherwise denies the remaining allegations in this Paragraph.
- 73. 10X admits that the "Chromium Single Cell V(D)J Enrichment Kit, Human T Cell, 96 rxns" (Product ID 1000005) included "Human T Cell Mix 1" (Product ID 2000008), and "Human T Cell Mix 2" (Product ID 2000009). 10X otherwise denies the remaining allegations in this Paragraph.
- 74. 10X admits that the "Chromium Single Cell V(D)J Enrichment Kit, Human B Cell, 96 rxns" (Product ID 1000016) included "Human B Cell Mix 1" (Product ID 2000035), and "Human B Cell Mix 2" (Product ID 2000036). 10X otherwise denies the remaining allegations in this Paragraph.
- 75. 10X admits that the "Chromium Single Cell A Chip Kit, 48 rxns" (Product ID 120236) included Single Cell A Chip (Product ID 230027), Gaskets (Product ID 370017), Partitioning Oil (Product ID 220088), and Recovery Agent (Product ID 220016). 10X otherwise denies the remaining allegations in this Paragraph.

- 76. 10X admits that the "Chromium Single Cell A Chip Kit, 16 rxns" (Product ID 1000009) included Single Cell A Chip (Product ID 2000019), Gaskets (Product ID 3000072), Partitioning Oil (Product ID 220088), and Recovery Agent (Product ID 220016). 10X otherwise denies the remaining allegations in this Paragraph.
- 77. 10X admits that the "Chromium Multiplex Kit, 96 rxns" (Product ID 120262) included the ChromiumTM i7 Sample Index Plate (Product ID220103). 10X otherwise denies the remaining allegations in this Paragraph.
- 78. 10X admits that the "Chromium i7 Multiplex Kit N, Set A, 96 rxns" (Product ID 1000084) included the Chromium i7 Sample Index Plate N, Set A (Product ID 3000262). 10X otherwise denies the remaining allegations in this Paragraph.
- 79. 10X admits that the "Chromium Single Cell V(D)J Enrichment Kit, Mouse B Cell, 96 rxns" (Product ID 1000072) included "Mouse B Cell Mix 1" (Product ID 2000080), and "Mouse B Cell Mix 2" (Product ID 2000081). 10X otherwise denies the remaining allegations in this Paragraph.
- 80. 10X admits that the "Chromium Single Cell V(D)J Enrichment Kit, Mouse T Cell, 96 rxns" (Product ID 1000071) included "Mouse T Cell Mix 1" (Product ID 2000075), and "Mouse T Cell Mix 2" (Product ID 2000079). 10X otherwise denies the remaining allegations in this Paragraph.
- 81. 10X admits that the "Chromium Single Cell 5' Feature Barcode Library Kit, 16 rxns" (Product ID 1000080) included SC5' Feature cDNA Primers (Product ID 2000119), Amplification Master Mix (Product ID 22015), and SI Primer (Product ID 2000095). 10X otherwise denies the remaining allegations in this Paragraph.

- 82. 10X admits that it has sold the "Chromium Training Chip Kit" (Product ID 120244), and the "Chromium Training Reagents and Gel Bead Kit" (Product ID 120238). 10X otherwise denies the remaining allegations in this Paragraph.
- 83. 10X admits that it has sold products that can be used with 10X's Single Cell Immune Profiling solution, including: "Chromium Controller & Accessory Kit" with 12- or 24-month warranty (Product ID 120223 or 120246) and the "Chromium Single Cell Controller & Accessory Kit" with 12 or 24 month warranty (Product ID 120263 or 120212). 10X otherwise denies the remaining allegations in this Paragraph.
- 84. 10X admits that the "Chromium Controller Accessory Kit" (Product ID 110204) included Power Cord (Product ID 34000X), $10x^{TM}$ Vortex Adapter (Product ID 330002), $10x^{TM}$ Chip Holder (Product ID 330019), $10x^{TM}$ Vortex Clip (Product ID 230002), $10x^{TM}$ Magnetic Separator (Product ID 230003), and Chromium Test Chip V1 (Product ID 230024). 10X otherwise denies the remaining allegations in this Paragraph.
- 85. 10X admits that it makes software available that can be used with 10X's Single Cell Gene Expression solution including Cell Ranger and Loupe Cell Browser. 10X further admits that it makes software available that can be used with 10X's Single Cell Immune Profiling solution including Cell Ranger and Loupe V(D)J Browser. 10X otherwise denies the remaining allegations in this Paragraph.
- 86. Paragraph 86 does not appear to plead any factual assertions. For that reason, 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 86 of the First Amended Complaint and, therefore, denies those allegations. 10X further denies that any 10X product infringes any claim of the BD Patents-in-Suit and denies that BD is entitled to any relief whatsoever.

BD'S PURPORTED DESCRIPTION OF SPATIAL TRANSCRIPTOMICS

- 87. 10X admits that version 180611 of the Spatial Transcriptomics Library Preparation Manual states that "The Library Preparation (LP) protocol generates spatially barcoded ready-to-load sequencing libraries from fresh frozen tissue sections." 10X otherwise denies the remaining allegations in this Paragraph.
- 88. 10X admits that the website spatialtranscriptomics.com/products/ lists the "ST Tissue Optimization Slide" and the "ST Library Preparation Slide" and provides functionality to request a price quote for these items. 10X otherwise denies the remaining allegations in this Paragraph.
- 89. 10X admits that the website spatialtranscriptomics.com/resources/ identifies software that can be used with Spatial Transcriptomics products. 10X otherwise denies the remaining allegations in this Paragraph.
- 90. Paragraph 90 does not appear to plead any factual assertions. For that reason, 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 90 of the First Amended Complaint and, therefore, denies those allegations. 10X further denies that any 10X product infringes any claim of the BD Patents-in-Suit and denies that BD is entitled to any relief whatsoever.
- 91. 10X denies the allegations and/or legal conclusions set forth in Paragraph 91. 10X further denies that any 10X product infringes any claim of the BD Patents-in-Suit and denies that BD is entitled to any relief whatsoever.

COUNT 1 (ALLEGED INFRINGEMENT OF THE '358 PATENT)

92. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.

- 93. 10X admits that U.S. Patent No. 8,835,358 ("the 358 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 1, states on its face that it was issued on September 16, 2014 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 93 and, on that basis, denies the same.
 - 94. 10X denies the allegations and/or legal conclusions of Paragraph 94.
 - 95. 10X denies the allegations and/or legal conclusions of Paragraph 95.
 - 96. 10X denies the allegations and/or legal conclusions of Paragraph 96.
 - 97. 10X denies the allegations and/or legal conclusions of Paragraph 97.
 - 98. 10X denies the allegations and/or legal conclusions of Paragraph 98.
 - 99. 10X denies the allegations and/or legal conclusions of Paragraph 99.
 - 100. 10X denies the allegations and/or legal conclusions of Paragraph 100.
 - 101. 10X denies the allegations and/or legal conclusions of Paragraph 101.
 - 102. 10X denies the allegations and/or legal conclusions of Paragraph 102.
- 103. 10X admits that Paragraph 103 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 103.
- 104. 10X admits that Paragraph 104 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 104.
- 105. 10X admits that Paragraph 105 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 105.

- 106. 10X admits that Paragraph 106 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 106.
- 107. 10X admits that Paragraph 107 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 107.
- 108. 10X admits that Paragraph 108 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 108.
- 109. 10X admits that Paragraph 109 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 109.
- 110. 10X admits that Paragraph 110 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 110.
- 111. 10X admits that Paragraph 111 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 111.
- 112. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 112 and denies that BD is entitled to any relief whatsoever.
- 113. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 113 and denies that BD is entitled to any relief whatsoever.
- 114. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 114 and denies that BD is entitled to any relief whatsoever.

- 115. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 115 and denies that BD is entitled to any relief whatsoever.
- 116. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 116 and denies that BD is entitled to any relief whatsoever.

COUNT 2 (ALLEGED INFRINGEMENT OF THE '857 PATENT)

- 117. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 118. 10X admits that U.S. Patent No. 9,315,857 ("the 857 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 2, states on its face that it was issued on April 19, 2016 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 118 and, on that basis, denies the same.
 - 119. 10X denies the allegations and/or legal conclusions of Paragraph 119.
 - 120. 10X denies the allegations and/or legal conclusions of Paragraph 120.
 - 121. 10X denies the allegations and/or legal conclusions of Paragraph 121.
 - 122. 10X denies the allegations and/or legal conclusions of Paragraph 122.
 - 123. 10X denies the allegations and/or legal conclusions of Paragraph 123.
 - 124. 10X denies the allegations and/or legal conclusions of Paragraph 124.
 - 125. 10X denies the allegations and/or legal conclusions of Paragraph 125.
 - 126. 10X denies the allegations and/or legal conclusions of Paragraph 126.
 - 127. 10X denies the allegations and/or legal conclusions of Paragraph 127.

- 128. 10X admits that Paragraph 128 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 128.
- 129. 10X admits that Paragraph 129 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 129.
- 130. 10X admits that Paragraph 130 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 130.
- 131. 10X admits that Paragraph 131 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 131.
- 132. 10X admits that Paragraph 132 includes an annotated image that appears to have been based on images from the cited document. 10X denies the remaining allegations of Paragraph 132.
- 133. 10X admits that Paragraph 133 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 133.
- 134. 10X admits that Paragraph 134 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 134.

- 135. 10X admits that Paragraph 135 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 135.
- 136. 10X admits that Paragraph 136 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 136.
- 137. 10X admits that Paragraph 137 includes annotated images that appear to have been based on images from the cited documents and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 137.
- 138. 10X admits that Paragraph 138 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 138.
- 139. 10X admits that Paragraph 139 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 139.
- 140. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 140 and denies that BD is entitled to any relief whatsoever.
- 141. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 141 and denies that BD is entitled to any relief whatsoever.
- 142. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 142 and denies that BD is entitled to any relief whatsoever.
- 143. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 143 and denies that BD is entitled to any relief whatsoever.
- 144. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 144 and denies that BD is entitled to any relief whatsoever.

COUNT 3 (ALLEGED INFRINGEMENT OF THE '137 PATENT)

- 145. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 146. 10X admits that U.S. Patent No. 9,816,137 ("the 137 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 3, states on its face that it was issued on November 14, 2017 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 146 and, on that basis, denies the same.
 - 147. 10X denies the allegations and/or legal conclusions of Paragraph 147.
 - 148. 10X denies the allegations and/or legal conclusions of Paragraph 148.
 - 149. 10X denies the allegations and/or legal conclusions of Paragraph 149.
 - 150. 10X denies the allegations and/or legal conclusions of Paragraph 150.
 - 151. 10X denies the allegations and/or legal conclusions of Paragraph 151.
 - 152. 10X denies the allegations and/or legal conclusions of Paragraph 152.
 - 153. 10X denies the allegations and/or legal conclusions of Paragraph 153.
 - 154. 10X denies the allegations and/or legal conclusions of Paragraph 154.
 - 155. 10X denies the allegations and/or legal conclusions of Paragraph 155.
- 156. 10X admits that Paragraph 156 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 156.
- 157. 10X admits that Paragraph 157 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 157.

- 158. 10X admits that Paragraph 158 includes annotated images that appear to have been based on images from the cited documents and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 158.
- 159. 10X admits that Paragraph 159 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 159.
- 160. 10X admits that Paragraph 160 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 160.
- 161. 10X admits that Paragraph 161 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 161.
- 162. 10X admits that Paragraph 162 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 162.
- 163. 10X admits that Paragraph 163 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 163.
- 164. 10X admits that Paragraph 164 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 164.
- 165. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 165 of the First Amended Complaint and, therefore, denies those allegations.

- 166. 10X admits that Paragraph 166 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 166.
- 167. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 167 of the First Amended Complaint and, therefore, denies those allegations.
- 168. 10X admits that Paragraph 168 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 168.
- 169. 10X admits that Paragraph 169 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 169.
- 170. 10X admits that Paragraph 170 includes an annotated image that appears to have been based on images from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 170.
- 171. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 171 and denies that BD is entitled to any relief whatsoever.
- 172. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 172 and denies that BD is entitled to any relief whatsoever.
- 173. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 173 and denies that BD is entitled to any relief whatsoever.
- 174. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 174 and denies that BD is entitled to any relief whatsoever.

175. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 175 and denies that BD is entitled to any relief whatsoever.

COUNT 4 (ALLEGED INFRINGEMENT OF THE '809 PATENT)

- 176. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 177. 10X admits that U.S. Patent No. 9,290,809 ("the 809 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 4, states on its face that it was issued on March 22, 2016 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 177 and, on that basis, denies the same.
 - 178. 10X denies the allegations and/or legal conclusions of Paragraph 178.
 - 179. 10X denies the allegations and/or legal conclusions of Paragraph 179.
 - 180. 10X denies the allegations and/or legal conclusions of Paragraph 180.
 - 181. 10X denies the allegations and/or legal conclusions of Paragraph 181.
 - 182. 10X denies the allegations and/or legal conclusions of Paragraph 182.
 - 183. 10X denies the allegations and/or legal conclusions of Paragraph 183.
 - 184. 10X denies the allegations and/or legal conclusions of Paragraph 184.
 - 185. 10X denies the allegations and/or legal conclusions of Paragraph 185.
 - 186. 10X denies the allegations and/or legal conclusions of Paragraph 186.
- 187. 10X admits that Paragraph 187 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 187.

- 188. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 188 and denies that BD is entitled to any relief whatsoever.
- 189. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 189 and denies that BD is entitled to any relief whatsoever.
- 190. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 190 and denies that BD is entitled to any relief whatsoever.
- 191. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 191 and denies that BD is entitled to any relief whatsoever.
- 192. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 192 and denies that BD is entitled to any relief whatsoever.
- 193. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 193 and denies that BD is entitled to any relief whatsoever.
- 194. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 194 and denies that BD is entitled to any relief whatsoever.

COUNT 5 (ALLEGED INFRINGEMENT OF THE '808 PATENT)

- 195. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 196. 10X admits that U.S. Patent No. 9,290,808 ("the 808 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 5, states on its face that it was issued on March 22, 2016 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 196 and, on that basis, denies the same.
 - 197. 10X denies the allegations and/or legal conclusions of Paragraph 197.

- 198. 10X denies the allegations and/or legal conclusions of Paragraph 198.
- 199. 10X denies the allegations and/or legal conclusions of Paragraph 199.
- 200. 10X denies the allegations and/or legal conclusions of Paragraph 200.
- 201. 10X denies the allegations and/or legal conclusions of Paragraph 201.
- 202. 10X denies the allegations and/or legal conclusions of Paragraph 202.
- 203. 10X denies the allegations and/or legal conclusions of Paragraph 203.
- 204. 10X denies the allegations and/or legal conclusions of Paragraph 204.
- 205. 10X denies the allegations and/or legal conclusions of Paragraph 205.
- 206. 10X admits that Paragraph 206 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 206.
- 207. 10X admits that Paragraph 207 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 207.
- 208. 10X admits that Paragraph 208 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 208.
- 209. 10X admits that Paragraph 209 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 209.
- 210. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 210 of the First Amended Complaint and, therefore, denies those allegations.

- 211. 10X admits that Paragraph 211 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 211.
- 212. 10X admits that Paragraph 212 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 212.
- 213. 10X admits that Paragraph 213 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 213.
- 214. 10X admits that Paragraph 214 includes an annotated image that appears to have been based on an image from the cited document. 10X denies the remaining allegations of Paragraph 214.
- 215. 10X admits that Paragraph 215 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 215.
- 216. 10X admits that Paragraph 216 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 216.
- 217. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 217 and denies that BD is entitled to any relief whatsoever.
- 218. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 218 and denies that BD is entitled to any relief whatsoever.
- 219. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 219 and denies that BD is entitled to any relief whatsoever.

- 220. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 220 and denies that BD is entitled to any relief whatsoever.
- 221. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 221 and denies that BD is entitled to any relief whatsoever.

COUNT 6 (ALLEGED INFRINGEMENT OF THE '659 PATENT)

- 222. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 223. 10X admits that U.S. Patent No. 9,708,659 ("the 659 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 6, states on its face that it was issued on July 18, 2017 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 223 and, on that basis, denies the same.
 - 224. 10X denies the allegations and/or legal conclusions of Paragraph 224.
 - 225. 10X denies the allegations and/or legal conclusions of Paragraph 225.
 - 226. 10X denies the allegations and/or legal conclusions of Paragraph 226.
 - 227. 10X denies the allegations and/or legal conclusions of Paragraph 227.
 - 228. 10X denies the allegations and/or legal conclusions of Paragraph 228.
 - 229. 10X denies the allegations and/or legal conclusions of Paragraph 229.
 - 230. 10X denies the allegations and/or legal conclusions of Paragraph 230.
 - 231. 10X denies the allegations and/or legal conclusions of Paragraph 231.
 - 232. 10X denies the allegations and/or legal conclusions of Paragraph 232.

- 233. 10X admits that Paragraph 233 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 233.
- 234. 10X admits that Paragraph 234 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 234.
- 235. 10X admits that Paragraph 235 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 235.
- 236. 10X admits that Paragraph 236 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 236.
- 237. 10X admits that Paragraph 237 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 237.
- 238. 10X admits that Paragraph 238 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 238.
- 239. 10X admits that Paragraph 239 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 239.
- 240. 10X admits that Paragraph 240 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 240.
- 241. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 241 and denies that BD is entitled to any relief whatsoever.

- 242. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 242 and denies that BD is entitled to any relief whatsoever.
- 243. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 243 and denies that BD is entitled to any relief whatsoever.
- 244. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 244 and denies that BD is entitled to any relief whatsoever.
- 245. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 245 and denies that BD is entitled to any relief whatsoever.

COUNT 7 (ALLEGED INFRINGEMENT OF THE '502 PATENT)

- 246. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 247. 10X admits that U.S. Patent No. 9,845,502 ("the 502 Patent"), entitled "Digital Counting of Individual Molecules by Stochastic Attachment of Diverse Labels," as attached to the First Amended Complaint as Exhibit 7, states on its face that it was issued on December 19, 2017 and names as inventors Stephen P. A. Fodor and Glenn K. Fu. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 247 and, on that basis, denies the same.
 - 248. 10X denies the allegations and/or legal conclusions of Paragraph 248.
 - 249. 10X denies the allegations and/or legal conclusions of Paragraph 249.
 - 250. 10X denies the allegations and/or legal conclusions of Paragraph 250.
 - 251. 10X denies the allegations and/or legal conclusions of Paragraph 251.
 - 252. 10X denies the allegations and/or legal conclusions of Paragraph 252.
 - 253. 10X denies the allegations and/or legal conclusions of Paragraph 253.
 - 254. 10X denies the allegations and/or legal conclusions of Paragraph 254.

- 255. 10X denies the allegations and/or legal conclusions of Paragraph 255.
- 256. 10X denies the allegations and/or legal conclusions of Paragraph 256.
- 257. 10X admits that Paragraph 257 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 257.
- 258. 10X admits that Paragraph 258 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 258.
- 259. 10X admits that Paragraph 259 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 259.
- 260. 10X admits that Paragraph 260 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 260.
- 261. 10X admits that Paragraph 261 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 261.
- 262. 10X is without information or knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 262 of the First Amended Complaint and, therefore, denies those allegations.
- 263. 10X admits that Paragraph 263 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 263.

- 264. 10X admits that Paragraph 264 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 264.
- 265. 10X admits that Paragraph 265 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 265.
- 266. 10X admits that Paragraph 266 includes an annotated image that appears to have been based on an image from the cited document and quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 266.
- 267. 10X admits that Paragraph 267 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 267.
- 268. 10X admits that Paragraph 268 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 268.
- 269. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 269 and denies that BD is entitled to any relief whatsoever.
- 270. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 270 and denies that BD is entitled to any relief whatsoever.
- 271. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 271 and denies that BD is entitled to any relief whatsoever.
- 272. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 272 and denies that BD is entitled to any relief whatsoever.
- 273. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 273 and denies that BD is entitled to any relief whatsoever.

COUNT 8 (ALLEGED INFRINGEMENT OF THE '645 PATENT)

- 274. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 275. 10X admits that U.S. Patent No. 9,567,645 ("the 645 Patent"), entitled "Massively Parallel Single Cell Analysis," as attached to the First Amended Complaint as Exhibit 8, states on its face that it was issued on February 14, 2017 and names as inventors Christina Fan, Stephen P. A. Fodor, Glenn Fu, Geoffrey Richard Facer, and Julie Wilhelmy. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 275 and, on that basis, denies the same.
 - 276. 10X denies the allegations and/or legal conclusions of Paragraph 276.
 - 277. 10X denies the allegations and/or legal conclusions of Paragraph 277.
 - 278. 10X denies the allegations and/or legal conclusions of Paragraph 278.
- 279. 10X admits that Paragraph 279 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 279.
- 280. 10X admits that Paragraph 280 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 280.
- 281. 10X admits that Paragraph 281 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 281.
- 282. 10X admits that Paragraph 282 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 282.

- 283. 10X admits that Paragraph 283 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 283.
- 284. 10X admits that Paragraph 284 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 284.
- 285. 10X admits that Paragraph 285 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 285.
- 286. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 286 and denies that BD is entitled to any relief whatsoever.
- 287. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 287 and denies that BD is entitled to any relief whatsoever.
- 288. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 288 and denies that BD is entitled to any relief whatsoever.
- 289. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 289 and denies that BD is entitled to any relief whatsoever.

COUNT 9 (ALLEGED INFRINGEMENT OF THE '646 PATENT)

- 290. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 291. 10X admits that U.S. Patent No. 9,567,646 ("the 646 Patent"), entitled "Massively Parallel Single Cell Analysis," as attached to the First Amended Complaint as Exhibit 9, states on its face that it was issued on February 14, 2017 and names as inventors Christina Fan, Stephen P. A. Fodor, Glenn Fu, Geoffrey Richard Facer, and Julie Wilhelmy. 10X is without knowledge or

information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 291 and, on that basis, denies the same.

- 292. 10X denies the allegations and/or legal conclusions of Paragraph 292.
- 293. 10X denies the allegations and/or legal conclusions of Paragraph 293.
- 294. 10X denies the allegations and/or legal conclusions of Paragraph 294.
- 295. 10X admits that Paragraph 295 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 295.
- 296. 10X admits that Paragraph 296 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 296.
- 297. 10X admits that Paragraph 297 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 297.
- 298. 10X admits that Paragraph 298 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 298.
- 299. 10X admits that Paragraph 299 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 299.
- 300. 10X admits that Paragraph 300 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 300.

- 301. 10X admits that Paragraph 301 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 301.
- 302. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 302 and denies that BD is entitled to any relief whatsoever.
- 303. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 303 and denies that BD is entitled to any relief whatsoever.
- 304. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 304 and denies that BD is entitled to any relief whatsoever.
- 305. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 305 and denies that BD is entitled to any relief whatsoever.

COUNT 10 (ALLEGED INFRINGEMENT OF THE '736 PATENT)

- 306. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 307. 10X admits that U.S. Patent No. 9,598,736 ("the 736 Patent"), entitled "Massively Parallel Single Cell Analysis," as attached to the First Amended Complaint as Exhibit 10, states on its face that it was issued on March 1, 2017 and names as inventors Christina Fan, Stephen P. A. Fodor, Glenn Fu, Geoffrey Richard Facer, and Julie Wilhelmy. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 307 and, on that basis, denies the same.
 - 308. 10X denies the allegations and/or legal conclusions of Paragraph 308.
 - 309. 10X denies the allegations and/or legal conclusions of Paragraph 309.
 - 310. 10X denies the allegations and/or legal conclusions of Paragraph 310.

- 311. 10X admits that Paragraph 311 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 311.
- 312. 10X admits that Paragraph 312 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 312.
- 313. 10X admits that Paragraph 313 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 313.
- 314. 10X admits that Paragraph 314 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 314.
- 315. 10X admits that Paragraph 315 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 315.
- 316. 10X admits that Paragraph 316 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 316.
- 317. 10X admits that Paragraph 317 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 317.
- 318. 10X admits that Paragraph 318 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 318.

- 319. 10X admits that Paragraph 319 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 319.
- 320. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 320 and denies that BD is entitled to any relief whatsoever.
- 321. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 321 and denies that BD is entitled to any relief whatsoever.
- 322. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 322 and denies that BD is entitled to any relief whatsoever.
- 323. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 323 and denies that BD is entitled to any relief whatsoever.

COUNT 11 (ALLEGED INFRINGEMENT OF THE '799 PATENT)

- 324. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.
- 325. 10X admits that U.S. Patent No. 9,637,799 ("the 799 Patent"), entitled "Massively Parallel Single Cell Analysis," as attached to the First Amended Complaint as Exhibit 11, states on its face that it was issued on May 2, 2017 and names as inventors Christina Fan, Stephen P. A. Fodor, Glenn Fu, Geoffrey Richard Facer, and Julie Wilhelmy. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 325 and, on that basis, denies the same.
 - 326. 10X denies the allegations and/or legal conclusions of Paragraph 326.
 - 327. 10X denies the allegations and/or legal conclusions of Paragraph 327.
 - 328. 10X denies the allegations and/or legal conclusions of Paragraph 328.

- 329. 10X admits that Paragraph 329 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 329.
- 330. 10X admits that Paragraph 330 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 330.
- 331. 10X admits that Paragraph 331 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 331.
- 332. 10X admits that Paragraph 332 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 332.
- 333. 10X admits that Paragraph 333 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 333.
- 334. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 334 and denies that BD is entitled to any relief whatsoever.
- 335. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 335 and denies that BD is entitled to any relief whatsoever.
- 336. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 336 and denies that BD is entitled to any relief whatsoever.
- 337. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 337 and denies that BD is entitled to any relief whatsoever.

COUNT 12 (ALLEGED INFRINGEMENT OF THE '799 PATENT)

338. 10X repeats, realleges, and incorporates by reference its responses to the allegations set forth in the preceding Paragraphs, as if fully set forth herein.

- 339. 10X admits that U.S. Patent No. 9,637,799 ("the 799 Patent"), entitled "Massively Parallel Single Cell Analysis," as attached to the First Amended Complaint as Exhibit 11, states on its face that it was issued on May 2, 2017 and names as inventors Christina Fan, Stephen P. A. Fodor, Glenn Fu, Geoffrey Richard Facer, and Julie Wilhelmy. 10X is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 339 and, on that basis, denies the same.
 - 340. 10X denies the allegations and/or legal conclusions of Paragraph 340.
 - 341. 10X denies the allegations and/or legal conclusions of Paragraph 341.
 - 342. 10X denies the allegations and/or legal conclusions of Paragraph 342.
- 343. 10X admits that Paragraph 343 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 343.
- 344. 10X admits that Paragraph 344 includes images and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 344.
- 345. 10X admits that Paragraph 345 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 345.
- 346. 10X admits that Paragraph 346 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 346.
- 347. 10X admits that Paragraph 347 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 347.

- 348. 10X admits that Paragraph 348 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 348.
- 349. 10X admits that Paragraph 349 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 349.
- 350. 10X admits that Paragraph 350 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 350.
- 351. 10X admits that Paragraph 351 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 351.
- 352. 10X admits that Paragraph 352 includes quoted language that appears to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 352.
- 353. 10X admits that Paragraph 353 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 353.
- 354. 10X admits that Paragraph 354 includes an image and quoted language that appear to have been reproduced from the cited documents. 10X denies the remaining allegations of Paragraph 354.
- 355. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 355 and denies that BD is entitled to any relief whatsoever.
- 356. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 356 and denies that BD is entitled to any relief whatsoever.

357. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 357 and denies that BD is entitled to any relief whatsoever.

358. 10X denies any and all of the allegations and/or legal conclusions set forth in Paragraph 358 and denies that BD is entitled to any relief whatsoever.

ANSWER TO BD'S PRAYER FOR RELIEF

BD's prayer for relief states legal conclusions to which no response is required, but to the extent that a response is required, 10X denies them and specifically asserts that BD is not entitled to any of the relief sought in its prayer for relief against 10X. BD's prayer for relief should be denied in its entirety, with prejudice, and BD should take nothing.

BD'S DEMAND FOR JURY TRIAL

10X acknowledges BD's request for a jury trial and 10X similarly requests a trial by jury on all issues so triable.

AFFIRMATIVE AND OTHER DEFENSES

Based on the information presently available to it, or information believed to be available after a reasonable opportunity for further investigation and discovery and without assuming the burden of proof or any other burden it would not otherwise have, 10X asserts the defenses identified below. 10X reserves the right to amend or supplement this Answer and Counterclaims with additional defenses as further information is obtained. 10X asserts each of these defenses in the alternative, without admitting that 10X is in any way liable to BD, that BD has been or will be injured or damaged in any way, or that BD is entitled to any relief whatsoever. 10X states the following defenses with respect to the Counts asserted in Plaintiffs' First Amended Complaint and each and every allegation contained therein:

FIRST DEFENSE (Non-Infringement)

359. 10X does not and has not infringed any valid and enforceable claim of the BD Patents-in-Suit literally or under the doctrine of equivalents. At a minimum, the accused 10X products and activities do not include or practice all the limitations of any independent claim of the BD Patents-in-Suit.

SECOND DEFENSE (Invalidity)

360. Each claim of the BD Patents-in-Suit is invalid for failure to comply with one or more of the requirements of Title 35 of the United States Code, including, among other sections, Sections 101, 102, 103, and/or 112, or the Rules and Regulations of the U.S. Patent & Trademark Office set forth in Title 37 of the Code of Federal Regulations.

THIRD DEFENSE (Prosecution History Estoppel and/or Prosecution Disclaimer)

361. On information and belief, Plaintiffs' claims are barred in whole or in part by the doctrines of prosecution history estoppel and/or prosecution disclaimer because of admissions, amendments, or statements made to the United States Patent and Trademark Office during prosecution of the applications leading to, or related to, the issuance of the Patents-in-Suit.

FOURTH DEFENSE (Equitable Estoppel)

362. Plaintiffs' claims are barred in whole or in part by the doctrine of equitable estoppel because of Plaintiffs' unreasonable delay in bringing suit after the Plaintiff knew of an alleged infringement of its rights.

<u>FIFTH DEFENSE</u> (Limitation on Damages and Failure to Provide Notice)

363. Plaintiffs' claim for damages for infringement is limited by 35 U.S.C. §§ 286, 287, and 288 for one or more of the Patents-in-Suit.

SIXTH DEFENSE (Adequate Remedy at Law)

364. Plaintiffs' claim for injunctive relief is barred because they have an adequate remedy at law, are not being, and are not in danger of being, irreparably harmed, the balance of the hardships is not in their favor, and the public interest is not served by the granting of injunctive relief.

SEVENTH DEFENSE (Laches)

365. Plaintiffs' claims for injunctive and other equitable relief are barred in whole or in part by the doctrine of laches because of Plaintiffs' unreasonable delay in bringing suit after the Plaintiff knew of an alleged infringement of its rights.

ADDITIONAL DEFENSES

366. 10X reserves all affirmative defenses under Rule 8(c) of the Federal Rules of Civil Procedure, the Patent Laws of the United States, and any other defenses at law or in equity that may now exist or in the future be available based on discovery and further factual investigation in this case, including without limitation defenses based on inventorship, ownership and/or inequitable conduct.

COUNTERCLAIMS

Pursuant to Federal Rule of Civil Procedure 13, Defendant and Counterclaim-Plaintiff 10X alleges the following against Plaintiffs and Counterclaim-Defendants BD.

PARTIES

- 1. 10X is a Delaware corporation with its principal place of business in Pleasanton,
 California.
 - 2. BD alleges that Becton, Dickinson and Company is a corporation organized and

existing under the laws of New Jersey, with its principal place of business in Franklin Lakes, NY.

3. BD alleges that Cellular Research, Inc. is a corporation organized and existing under the laws of Delaware, with its principal place of business in Menlo Park, California.

JURISDICTION AND VENUE

- 4. These counterclaims arise under Title 35 of the United States Code. Subject to the affirmative defenses and denials set forth above, this Court has subject matter jurisdiction over these Counterclaims pursuant to 28 U.S.C. §§ 1331, 1338, 1367, and 2201.
- 5. BD has submitted to the personal jurisdiction of this Court by, without limitation, bringing the present action alleging infringement of the BD Patents-in-Suit.
- 6. Venue is proper in this judicial district pursuant to, without limitation, 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b).

OVERVIEW OF BD'S INFRINGING PRODUCTS

- 7. As set forth in more detail below, BD is infringing certain patents owned by 10X, including U.S. Patent No. 10,273,541 (the "'541 Patent"), U.S. Patent No. 10,240,197 (the "'197 Patent"), and U.S. Patent No. 10,392,662 (the "'662 Patent") (collectively the "10X Patents-in-Suit").
- 8. Set forth below are preliminary exemplary descriptions detailing BD's infringing products. These descriptions are not intended to limit 10X's right to amend, supplement or modify these descriptions or any other analysis, or allege that other activities of BD infringe the identified claims or any other claims of these patents or any other patents.
- 9. BD manufactures, uses, sells, offers for sale and/or imports the BD Rhapsody Single Cell Analysis System line of products, which BD describes as a "platform that enables expression profiling of tens of thousands of cells," *see* https://go.bd.com/bd-rhapsody.html, and as a "portfolio of products" for single-cell analysis allowing researchers to "interrogate gene

expression from hundreds to tens of thousands of single cells from one or multiple samples simultaneously," *see* BD-Single-Cell-Multiomics-Portfolio-Brochure.pdf.

- 10. BD also markets, and sells various instruments, reagents, software, and parts and training kits as a single "Single Cell Analysis Workflow with BD Rhapsody Systems." *See* GMX_Single-Cell-Analysis-Workflow-with-BD-Rhapsody-Systems_QG_EN.pdf. As described in BD's literature, the "System components" of the BD Rhapsody System include the "BD Rhapsody scanner," the "BD Rhapsody sample loading station," the "BD Rhapsody cartridge," "Reagents for Molecular Indexing and library preparation," and "Application-specific targeted panels." GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf.
- 11. On information and belief, the BD Rhapsody instruments include at least the BD Rhapsody Single-Cell Analysis System and the BD Rhapsody Express Single Cell Analysis System.
- 12. On information and belief, reagents and kits sold by BD for the BD Rhapsody Single-Cell Analysis System and the BD Rhapsody Express Single Cell Analysis System include at least the BD Single Cell Multiplexing Kit (Cat. No. 633781), BD AbSeq Ab-Oligos, BD Rhapsody Cartridge Reagent Kit (Cat. No. 633731), BD Rhapsody Cartridge Kit (Cat. No. 633733), BD Rhapsody cDNA Kit (Cat. No. 633773), BD Rhapsody Targeted mRNA and AbSeq Amplification Kit (Cat. No. 633774), BD Rhapsody targeted primer panels, and BD Rhapsody Custom Panel (Cat. No. 633743).
- 13. The term "Accused BD Products" is used hereinafter to refer to the foregoing systems, devices, products, instruments, accessories, reagents, software, parts, components, and kits sold or provided by BD, and any and all other products that are within or sold in conjunction with the BD Rhapsody System product line.

14. BD has been using, making, marketing, and selling the Accused BD Products and associated accessories and reagents, since at least late 2017.

FIRST COUNTERCLAIM

(INFRINGEMENT OF U.S. PATENT NO. 10,273,541)

- 15. 10X incorporates each of the preceding paragraphs as if fully set forth herein.
- 16. 10X counterclaims against BD pursuant to the patent laws of the United States,Title 35 of the United States Code.
- 17. By assignment, 10X is the owner of all rights, title, and interest in and to U.S. Patent No. 10,273,541, entitled "Methods and systems for processing polynucleotides" (Exhibit A), which issued on April 30, 2019 to inventors Benjamin Hindson, Christopher Hindson, Michael Schnall-Levin, Kevin Ness, Mirna Jarosz, Serge Saxonov, and Paul Hardenbol.
- 18. 10X has never licensed or permitted BD to practice any of the inventions claimed in the '541 Patent.
- 19. BD directly infringes at least claim 1 of the '541 Patent, literally or under the doctrine of equivalents, by making, using, selling, offering for sale and/or importing Accused BD Products into the United States, including this district.
 - 20. Claim 1 reads as follows.
 - 1. A method for processing messenger ribonucleic acid (mRNA) molecules from a single cell, comprising:
 - (a) partitioning a plurality of cells and a plurality of beads in a microwell array comprising a plurality of wells, wherein a well of said plurality of wells comprises said single cell from said plurality of cells and a single bead from said plurality of beads, and wherein said single bead comprises nucleic acid barcode molecules each comprising a common barcode sequence;

- (b) in said well comprising said single cell and said single bead, releasing messenger ribonucleic acid (mRNA) molecules from said single cell, wherein upon release from said single cell, said released mRNA molecules attach to said nucleic acid barcode molecules;
- (c) subjecting said released mRNA molecules attached to said nucleic acid barcode molecules to reverse transcription to yield complementary deoxyribonucleic acid (cDNA) molecules each comprising said common barcode sequence or a complement thereof; and
- (d) subjecting said cDNA molecules to one or more reactions to generate a set of nucleic acid molecules for nucleic acid sequencing.
- 21. The following is based on information and belief that 10X has at this stage. This evidence is merely exemplary, detailing with particularity how each element of the claims may be found in the Accused BD Products.
- 22. The Accused BD Products perform or are used for performing a "method for processing messenger ribonucleic acid (mRNA) molecules from a single cell" literally or under the doctrine of equivalents. In the Accused BD Products, "partitioning a plurality of cells and a plurality of beads in a microwell array comprising a plurality of wells, wherein a well of said plurality of wells comprises said single cell from said plurality of cells and a single bead from said plurality of beads," as recited in step (a), occurs, literally or under the doctrine of equivalents, because the Accused BD Products "Pair ONE cell with ONE barcoded bead in microwell" as shown below.

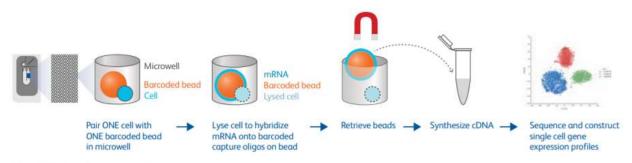


Figure 1. BD Rhapsody system workflow.

GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

23. The "single bead" of the Accused BD Products further "comprises nucleic acid barcode molecules each comprising a common barcode sequence," as recited in step (a), literally or under the doctrine of equivalents, because the beads of the Accused BD Products are "magnetic oligonucleotide barcoded beads." GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3. The "Cell label" of the oligonucleotide, as shown below, is the "common barcode sequence."



GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

24. In the Accused BD Products, "in said well comprising said single cell and said single bead, releasing messenger ribonucleic acid (mRNA) molecules from said single cell, wherein upon release from said single cell, said released mRNA molecules attach to said nucleic acid barcode molecules," as recited in step (b), occurs, literally or under the doctrine of equivalents, because the Accused BD Products "Lyse [the] cell to hybridize mRNA onto barcoded capture oligos on bead," as shown below.

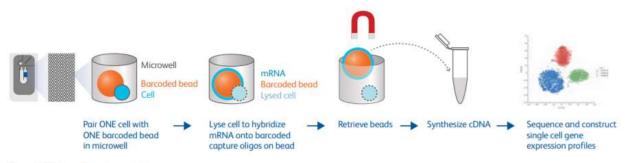


Figure 1. BD Rhapsody system workflow.

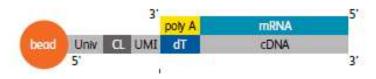
GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

25. In the Accused BD Products, "subjecting said released mRNA molecules attached to said nucleic acid barcode molecules to reverse transcription to yield complementary deoxyribonucleic acid (cDNA) molecules each comprising said common barcode sequence or a complement thereof" as recited in step (c), occurs, literally or under the doctrine of equivalents, because the Accused BD Products use "Reverse transcription" to create "cDNA archived on bead and tagged with cell label and molecular index," as shown below.

Beads with hybridized mRNA retrieved from cartridge



cDNA archived on bead and tagged with cell label and molecular index

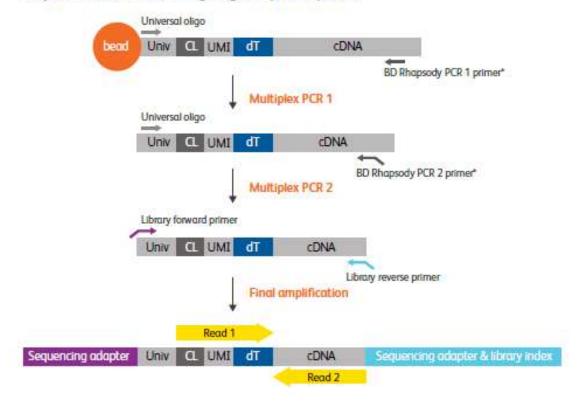


GMX BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

26. In the Accused BD Products, "subjecting said cDNA molecules to one or more reactions to generate a set of nucleic acid molecules for nucleic acid sequencing" as recited in step (d), occurs, literally or under the doctrine of equivalents, because the Accused BD Products

perform "Amplification of cDNA using targeted primer panels," as shown below.

Amplification of cDNA using targeted primer panels



GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3. The amplified cDNA comprises "Sequencing adapter[s]" and is then ready to be "Sequence[d] on Illumina platforms," as shown below.

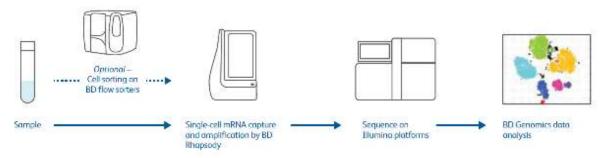


Figure 3 Example BD Rhapsody workflow including cell isolation (FACS optional), cell capture and molecular indexing, sequencing and data analysis

GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 4.

27. BD actively, knowingly, and intentionally induces infringement of one or more

claims of the '541 Patent, including at least claim 1, under 35 U.S.C. § 271(b) by actively encouraging others, including its customers, to make, use, offer to sell, sell, and/or import the Accused BD Products in this judicial district and elsewhere in the United States. On information and belief, BD had actual knowledge of the '541 Patent, regularly monitors 10X's patent portfolio, and has been aware of the '541 Patent. For example, on information and belief, BD has copied claims from at least one 10X pending patent application into a BD pending patent application, and BD has cited patents in the same family as the '541 Patent in its own patent applications. And BD actively promotes the sale, use, and importation of its infringing Accused BD Products in marketing materials, technical specifications, data sheets, web pages on its website, press releases, and user manuals, as well as at trade shows and through its sales and distribution channels that encourage infringing offers to sell, sales, and/or importation of the Accused BD Products. These actions collectively demonstrate that BD has had the specific intent to induce, or was willfully blind to inducing, infringement of the '541 Patent.

- 28. BD also contributes to the infringement by others, including its customers, of one or more claims of the '541 Patent, including at least claim 1. BD provides these customers with the Accused BD Products, which are specially made or adapted to infringe these claims and are not staple articles of commerce suitable for substantial noninfringing use. As discussed above, on information and belief, BD has had actual knowledge of the '541 Patent, regularly monitors 10X's patent portfolio, and has been aware of the '541 Patent. For example, on information and belief, BD has copied claims from at least one 10X pending patent application into a BD pending patent application, and BD has cited patents in the same family as the '541 Patent in its own patent applications.
 - 29. BD has committed and continues to commit these acts of infringement without

license or authorization.

- 30. The infringement of the '541 Patent by BD is willful, deliberate, and egregious. On information and belief, at least prior to the filing of this Complaint, BD knew or should have known that its making, using, selling, offering to sell, and/or importing the Accused BD Products has and will constitute an unjustifiably high risk of infringement of the '541 Patent. Such conduct constitutes, at minimum, willful infringement of the '541 Patent, justifying an award of treble damages pursuant to 35 U.S.C. § 284, and a finding that this case is exceptional under 35 U.S.C. §285.
- 31. On information and belief, BD has profited from and will continue to profit from its infringing activities. 10X has been and will continue to be damaged by BD's infringing activities. As a result, 10X is entitled to injunctive relief and damages adequate to compensate it for such infringement, in no event less than a reasonable royalty, in accordance with 35 U.S.C. §§ 271, 281, 283, and 284. The harm to 10X from BD's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless BD's infringing activities are enjoined.

SECOND COUNTERCLAIM

(INFRINGEMENT OF U.S. PATENT NO. 10,240,197)

- 32. 10X incorporates each of the preceding paragraphs as if fully set forth herein.
- 33. 10X counterclaims against BD pursuant to the patent laws of the United States, Title 35 of the United States Code.
- 34. By assignment, 10X is the owner of all rights, title, and interest in and to U.S. Patent No. 10,240,197 entitled "Methods for analyzing nucleic acids from single cells" (Exhibit B), which issued on March 26, 2019 to Sydney Brenner, Gi Mikawa, Robert Osborne, and Andrew Slatter.
 - 35. 10X has never licensed or permitted BD to practice any of the inventions claimed

in the '197 Patent.

36. BD directly infringes at least claim 1 of the '197 Patent, literally or under the doctrine of equivalents, by making, using, selling, offering for sale and/or importing Accused BD Products into the United States, including this district.

37. Claim 1 reads as follows.

- 1. A method of counting nucleic acids in a sample, the method comprising:
 - (a) providing a sample comprising a plurality of cells, wherein a cell of the plurality of cells comprises a plurality of sample polynucleotides;
 - (b) generating a plurality of tagged polynucleotides from the plurality of sample polynucleotides of said cell and a plurality of oligonucleotide tags, wherein a tagged polynucleotide of the plurality of tagged polynucleotides comprises:
 - (i) a sample sequence from a sample polynucleotide of the plurality of sample polynucleotides;
 - (ii) a first tag sequence distinguishing said sample polynucleotide from sample polynucleotides from other cells; and
 - (iii) a second tag sequence distinguishing said sample polynucleotide from other sample polynucleotides from said cell;
 - (c) sequencing the tagged polynucleotide to determine the sample sequence, the first tag sequence, and the second tag sequence; and
 - (d) using the first tag sequence and the second tag sequence to count a number of sample polynucleotides in said plurality of sample polynucleotides of said cell.

- 38. The following is based on information and belief that 10X has at this stage. This evidence is merely exemplary, detailing with particularity how each element of the claims may be found in the Accused BD Products.
- 39. The Accused BD Products perform or are used for performing a "method of counting nucleic acids in a sample" literally or under the doctrine of equivalents. In the Accused BD Products, "providing a sample comprising a plurality of cells, wherein a cell of the plurality of cells comprises a plurality of sample polynucleotides," as recited in step (a), occurs, literally or under the doctrine of equivalents, because the Accused BD Products "Pair ONE cell with ONE barcoded bead in microwell" and "Lyse [the] cell to hybridize mRNA onto barcoded capture oligos on bead," as shown below.

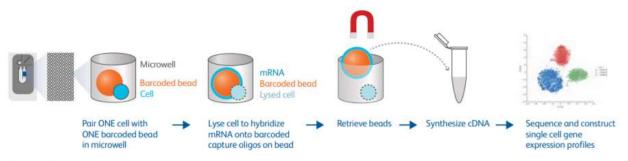
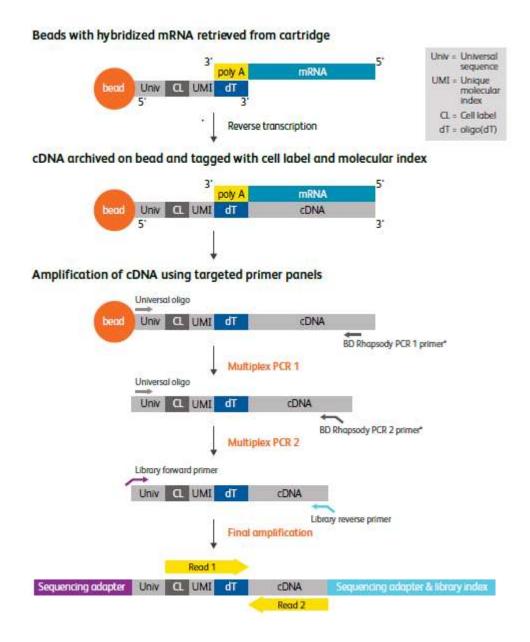


Figure 1. BD Rhapsody system workflow.

GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3. This is performed "across tens of thousands of single cells." *Id.* at 2.

40. In the Accused BD Products, "generating a plurality of tagged polynucleotides from the plurality of sample polynucleotides of said cell and a plurality of oligonucleotide tags" as recited in step (b), occurs, literally or under the doctrine of equivalents, because the Accused BD Products use "Reverse transcription" to create "cDNA archived on bead and tagged with cell label and molecular index," and "Amplification of cDNA" to create tagged polynucleotides as shown below.



GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 3.

41. A "tagged polynucleotide of the plurality of tagged polynucleotides" of the Accused BD Products further comprises "a sample sequence from a sample polynucleotide of the plurality of sample polynucleotides," as recited in subsection (i) of step (b), literally or under the doctrine of equivalents, because the tagged polynucleotide is created from the mRNA from the lysed cell, as shown below.

Beads with hybridized mRNA retrieved from cartridge Univ = Universal sequence **mRNA** UMI = Unique molecular index CL = Cell label Reverse transcription dT = oligo(dT)cDNA archived on bead and tagged with cell label and molecular index mRNA Univ a UMI CDNA dT 5 Amplification of cDNA using targeted primer panels Universal oligo Univ CL UMI CDNA BD Rhapsody PCR 1 primer* Multiplex PCR 1 Universal oligo cDNA Univ CL UMI BD Rhapsody PCR 2 primer* Multiplex PCR 2 Library forward primer Univ C. UMI Library reverse primer Final amplification Read 1 CL UMI dT CDNA Sequencing adapter Univ Sequencing adapter & library index Read 2

GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 3.

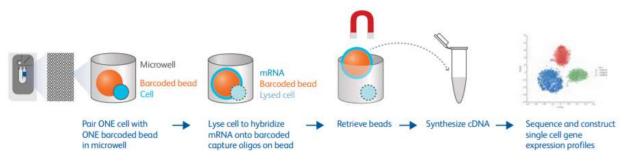


Figure 1. BD Rhapsody system workflow.

GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

42. A "tagged polynucleotide of the plurality of tagged polynucleotides" of the Accused BD Products further comprises "a first tag sequence distinguishing said sample polynucleotide from sample polynucleotides from other cells," as recited in subsection (ii) of step (b), literally or under the doctrine of equivalents, because the tagged polynucleotide has a "Cell label" as shown below.



GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 3.

43. A "tagged polynucleotide of the plurality of tagged polynucleotides" of the Accused BD Products further comprises "a second tag sequence distinguishing said sample polynucleotide from other sample polynucleotides from said cell," as recited in subsection (iii) of step (b), literally or under the doctrine of equivalents, because the tagged polynucleotide has a "Unique molecular index" as shown below.



GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

44. In the Accused BD Products, "sequencing the tagged polynucleotide to determine the sample sequence, the first tag sequence, and the second tag sequence" as recited in step (c), occurs, literally or under the doctrine of equivalents, because performing the "BD Rhapsody

workflow" of the Accused BD Products includes "sequencing," as shown below.

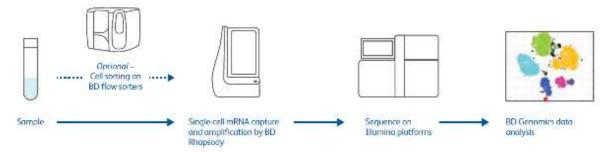


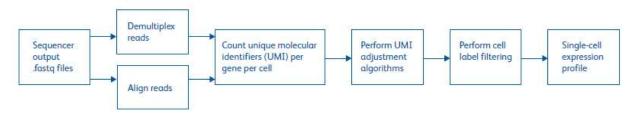
Figure 3. Example BD Rhapsody workflow including cell isolation (FACS optional); cell capture and molecular indexing, sequencing and data analysis:

GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 4.

45. In the Accused BD Products, "using the first tag sequence and the second tag sequence to count a number of sample polynucleotides in said plurality of sample polynucleotides of said cell." as recited in step (d), occurs, literally or under the doctrine of equivalents, because the Accused BD Products "assign[] unique molecular indices (UMI) for counting individual genes in individual cells, also known as 'molecular barcoding,'" and as shown below.

Advanced software and visualization adds flex to your results

Bioinformatics pipeline and visualization tools are also provided with the BD Rhapsody system. These tools consist of UMI analysis algorithms and visualization tools enabling even inexperienced users to analyze and understand single cell data.



GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 4, 8.

46. BD actively, knowingly, and intentionally induces infringement of one or more claims of the '197 Patent, including at least claim 1, under 35 U.S.C. § 271(b) by actively encouraging others, including its customers, to make, use, offer to sell, sell, and/or import the Accused BD Products in this judicial district and elsewhere in the United States. On information

and belief, BD had actual knowledge of the '197 Patent, regularly monitors 10X's patent portfolio, and has been aware of the '197 Patent. For example, on information and belief, BD has copied claims from at least one 10X pending patent application into a BD pending patent application, and BD has cited patents in the same family as the '197 Patent in its own patent applications. And BD actively promotes the sale, use, and importation of its infringing Accused BD Products in marketing materials, technical specifications, data sheets, web pages on its website, press releases, and user manuals, as well as at trade shows and through its sales and distribution channels that encourage infringing offers to sell, sales, and/or importation of the Accused BD Products. These actions collectively demonstrate that BD has had the specific intent to induce, or was willfully blind to inducing, infringement of the '197 Patent.

- 47. BD also contributes to the infringement by others, including its customers, of one or more claims of the '197 Patent, including at least claim 1. BD provides these customers with the Accused BD Products, which are specially made or adapted to infringe these claims and are not staple articles of commerce suitable for substantial noninfringing use. As discussed above, on information and belief, BD has had actual knowledge of the '197 Patent, regularly monitors 10X's patent portfolio, and has been aware of the '197 Patent. For example, on information and belief, BD has copied claims from at least one 10X pending patent application into a BD pending patent application, and BD has cited patents in the same family as the '197 Patent in its own patent applications.
- 48. BD has committed and continues to commit these acts of infringement without license or authorization.
- 49. The infringement of the '197 Patent by BD is willful, deliberate, and egregious. On information and belief, at least prior to the filing of this Complaint, BD knew or should have known

that its making, using, selling, offering to sell, and/or importing the Accused BD Products has and will constitute an unjustifiably high risk of infringement of the '197 Patent. Such conduct constitutes, at minimum, willful infringement of the '197 Patent, justifying an award of treble damages pursuant to 35 U.S.C. § 284, and a finding that this case is exceptional under 35 U.S.C. §285.

50. On information and belief, BD has profited from and will continue to profit from its infringing activities. 10X has been and will continue to be damaged by BD's infringing activities. As a result, 10X is entitled to injunctive relief and damages adequate to compensate it for such infringement, in no event less than a reasonable royalty, in accordance with 35 U.S.C. §§ 271, 281, 283, and 284. The harm to 10X from BD's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless BD's infringing activities are enjoined.

THIRD COUNTERCLAIM

(INFRINGEMENT OF U.S. PATENT NO. 10,392,662)

- 51. 10X incorporates each of the preceding paragraphs as if fully set forth herein.
- 52. 10X counterclaims against BD pursuant to the patent laws of the United States, Title 35 of the United States Code.
- 53. By assignment, 10X is the owner of all rights, title, and interest in and to U.S. Patent No. 10,392,662 entitled "Methods for analyzing nucleic acids from single cells" (Exhibit C), which issued on August 27, 2019 to Sydney Brenner, Gi Mikawa, Robert Osborne, and Andrew Slatter.
- 54. 10X has never licensed or permitted BD to practice any of the inventions claimed in the '662 Patent.
- 55. BD directly infringes at least claim 1 of the '662 Patent, literally or under the doctrine of equivalents, by making, using, selling, offering for sale and/or importing Accused BD

Products into the United States, including this district.

- 56. Claim 1 reads as follows.
 - 1. A composition for multiplexed nucleic acid analysis, comprising:
 - a plurality of beads, wherein the beads are covalently attached to a plurality of oligonucleotide tags, and wherein an oligonucleotide tag of said plurality of oligonucleotide tags comprises:
 - (a) a first tag sequence configured to distinguish a sample polynucleotide originating from a cell from sample polynucleotides originating from other cells; and
 - (b) a second tag sequence configured to distinguish said sample polynucleotide from other sample polynucleotide from the same cell and having the same sequence as said sample polynucleotide.
- 57. The following is based on information and belief that 10X has at this stage. This evidence is merely exemplary, detailing with particularity how each element of the claims may be found in the Accused BD Products.
- 58. The Accused BD Products are a "composition for multiplexed nucleic acid analysis," literally or under the doctrine of equivalents. The Accused BD Products comprise "a plurality of beads, wherein the beads are covalently attached to a plurality of oligonucleotide tags," literally or under the doctrine of equivalents, because the beads of the Accused BD Products are "magnetic oligonucleotide barcoded beads." GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3. An illustration of the beads is shown below.



GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 3.

59. The "oligonucleotide tag" of the Accused BD Products further comprise "a first tag sequence configured to distinguish a sample polynucleotide originating from a cell from sample polynucleotides originating from other cells," as recited in subsection (a), literally or under the doctrine of equivalents, because the beads of the Accused BD Products comprise a "Cell label." as shown below.



GMX_BD-Rhapsody-Single-Cell-Analysis-System_BR_EN.pdf at p. 3.

60. The "oligonucleotide tag" of the Accused BD Products further comprise "a second tag sequence configured to distinguish said sample polynucleotide from other sample polynucleotide from the same cell and having the same sequence as said sample polynucleotide," as recited in subsection (b), literally or under the doctrine of equivalents, because the beads of the Accused BD Products comprise a "Unique molecular index." as shown below.



GMX BD-Rhapsody-Single-Cell-Analysis-System BR EN.pdf at p. 3.

- 61. BD actively, knowingly, and intentionally induces infringement of one or more claims of the '662 Patent, including at least claim 1, under 35 U.S.C. § 271(b) by actively encouraging others, including its customers, to make, use, offer to sell, sell, and/or import the Accused BD Products in this judicial district and elsewhere in the United States. On information and belief, BD had actual knowledge of the '662 Patent, regularly monitors 10X's patent portfolio, and has been aware of the '662 Patent. For example, on information and belief, BD has copied claims from at least one 10X pending patent application into a BD pending patent application, and BD has cited patents in the same family as the '662 Patent in its own patent applications. And BD actively promotes the sale, use, and importation of its infringing Accused BD Products in marketing materials, technical specifications, data sheets, web pages on its website, press releases, and user manuals, as well as at trade shows and through its sales and distribution channels that encourage infringing offers to sell, sales, and/or importation of the Accused BD Products. These actions collectively demonstrate that BD has had the specific intent to induce, or was willfully blind to inducing, infringement of the '662 Patent.
- 62. BD also contributes to the infringement by others, including its customers, of one or more claims of the '662 Patent, including at least claim 1. BD provides these customers with the Accused BD Products, which are specially made or adapted to infringe these claims and are not staple articles of commerce suitable for substantial noninfringing use. As discussed above, BD has had actual knowledge of the '662 Patent, regularly monitors 10X's patent portfolio, and has been aware of the '662 Patent. For example, on information and belief, BD has copied claims from at least one 10X pending patent application into a BD pending patent application, and BD has cited patents in the same family as the '662 Patent in its own patent applications.

- 63. BD has committed and continues to commit these acts of infringement without license or authorization.
- 64. The infringement of the '662 Patent by BD is willful, deliberate, and egregious. On information and belief, at least prior to the filing of this Complaint, BD knew or should have known that its making, using, selling, offering to sell, and/or importing the Accused BD Products and will constitute an unjustifiably high risk of infringement of the '662 Patent. Such conduct constitutes, at minimum, willful infringement of the '662 Patent, justifying an award of treble damages pursuant to 35 U.S.C. § 284, and a finding that this case is exceptional under 35 U.S.C. §285.
- 65. On information and belief, BD has profited from and will continue to profit from its infringing activities. 10X has been and will continue to be damaged by BDs infringing activities. As a result, 10X is entitled to injunctive relief and damages adequate to compensate it for such infringement, in no event less than a reasonable royalty, in accordance with 35 U.S.C. §§ 271, 281, 283, and 284. The harm to 10X from BD's ongoing infringing activity is irreparable, continuing, and not fully compensable by money damages, and will continue unless BD's infringing activities are enjoined.

PRAYER FOR RELIEF

Defendant and Counterclaim-Plaintiff 10X respectfully requests that the Court find in its favor and grant the following relief:

- a. That BD's First Amended Complaint be dismissed with prejudice, and that BD take nothing against 10X by the First Amended Complaint;
- b. For entry of judgment in favor of 10X against BD on BD's First Amended Complaint;
- c. For entry of judgment that the BD Patents-in-Suit are invalid and not infringed by 10X;

- d. That BD be required to pay 10X's costs of suit;
- e. For entry of judgment that the '541 Patent, the '197 Patent, and the '662 Patent have been and continue to be directly and/or indirectly infringed by BD, either literally or under the doctrine of equivalents;
- f. For a declaration that each of the '541 Patent, the '197 Patent, and the '662 Patent is valid and enforceable;
- g. For permanent injunctions enjoining the aforesaid acts of infringement by BD, its officers, agents, servants, employees, attorneys, parent and subsidiary entities, assigns and successors in interest, and those persons acting in concert with them, including related individuals and entities, customers, representatives, distributors, and dealers. In the alternative, if the Court finds that an injunction is not warranted, 10X requests an award of post-judgment royalty to compensate for future infringement;
- h. For an accounting of all damages sustained by 10X as the result of the acts of BD as alleged herein;
- i. For the award to 10X of damages so ascertained, together with prejudgment interest as provided by law;
- j. For entry of judgment that BD's infringement is willful, and for an award of treble damages pursuant to 35 U.S.C. § 284;
- k. For judgment that this case is exceptional, and for an award of all costs, disbursements, and attorneys' fees pursuant to 35 U.S.C. § 285; and
- l. For such other and further legal and/or equitable relief as the Court shall deem just and proper.

10X reserves the right to amend its Answer, Affirmative Defenses, and Counterclaims to raise additional affirmative defenses, and to raise additional counterclaims as warranted by subsequent investigation and/or analysis.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, 10X demands a trial by jury on all issues properly triable to a jury.

Date: September 3, 2019

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